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ABSTRACT

Surveys of 147 special education teachers and observations of 20 practicing teachers and 20 cooperating teachers were used to (1) determine which evaluation procedures are used most often by special education teachers in their evaluation of student progress, and (2) assess the adequacy of those procedures. Survey respondents indicated that they assess progress on individualized education program (IEP) objectives quarterly, that they rely on informal observation for assessing students' mastery of objectives, and that they are confident in their assessments of student performance. Observations of teachers during instruction corroborated these survey findings; teachers actually relied on and were confident in their informal observations of student performance on lesson objectives. Nevertheless, the observed teachers were highly inaccurate in their assessments of student mastery of lesson objectives and in their estimates of performance on lesson objectives. Implications for monitoring student progress are discussed. (Author/DB)

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Research Report No. 81

SPECIAL EDUCATION PRACTICE IN EVALUATING STUDENT PROGRESS TOWARD GOALS

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Abstract

Surveys of 147 special education teachers and observations of 20 practicing teachers and 20 cooperating teachers were used to (a) determine which evaluation procedures are used most often by special education teachers in their evaluation of student progress, and (b) assess the adequacy of those procedures. Survey respondents indicated that typically they assess progress on IEP objectives quarterly, they rely on informal observation for assessing students' mastery of objectives, and they are confident in their assessments of student performance. Observations of teachers during instruction corroborated these survey findings; teachers actually relied on and were confident in their informal observations of student performance on lesson objectives. Nevertheless, the observed teachers were highly inaccurate in their assessments of student mastery of lesson objectives and in their estimates of performance on lesson objectives. Implications for monitoring student progress are discussed.

Special Education Practice in Evaluating Student Progress Towards Goals

PL 94-142 requires special education teachers to formulate short-term objectives and annual goals to ensure appropriate education and to facilitate handicapped pupils' movement toward less restrictive educational settings. Federal law also directs special education teachers to assess student progress toward specified objectives and goals. Despite this apparent concern for and emphasis on student evaluation, PL 94-142 does not specify how student progress should be assessed; educators are free to choose whatever assessment procedures they wish.

A reasonable assumption is that special educators employ a variety of approaches to evaluate pupil progress. However, a precise description of these approaches and the frequency of their use currently is unavailable. Without such information, it is impossible to determine the adequacy of special education practice in monitoring pupils' progress toward IEP goals and objectives. The purpose of this investigation was to address two questions: (1) Which evaluation procedures are used most often by special education teachers to evaluate student progress, and (2) How valid are these procedures?

Method

Survey

Subjects. A survey was mailed to 400 special educators. Twenty were special education teachers who, when the study began, had trainees in their classrooms from a local teacher-training college.

The remaining 380 special educators were the non-student member population of the Massachusetts Federation of the Council for Exceptional Children (CEC). Of the total group, 147 (37%) returned their completed surveys within a specified time limit. This response rate reflects the fact that many of the CEC members to whom the survey was sent were not teachers; the cover letter requested that only teachers complete the survey form.

The responding teachers (19 male, 128 female) had taught special education an average 8.09 years (SD = 5.27), with 49.6% currently conducting mainstream or resource programs, 27.9% teaching special education self-contained public school classrooms, and 22.4% working in other settings including special education self-contained private or residential schools, private clinics, vocational educational schools, and preschool special education centers. The highest educational degree earned was a bachelor's degree for 35 teachers (23.8%), a master's degree for 82 teachers (55.8%), two master's degrees for 16 teachers (10.8%), and a specialist or doctoral degree for 14 teachers (9.5%). All subjects were certified as special educators.

Materials and procedure. A survey was developed to investigate how special educators assess their students' mastery of both IEP objectives and instructional material presented in daily lessons (see Survey Form in Appendix). In addition to requesting background information, the survey contained four items that explored: (a) how often evaluations are conducted on pupils' progress toward their IEP objectives, (b) the types of measures that are used to assess this

progress, (c) how confident special educators are in their estimates of students' daily performance on instructional objectives, and (d) procedures for assessing students' level of performance on objectives addressed during daily lessons. Surveys and stamped return envelopes were mailed in May 1982. No follow-up contacts were made.

Observation

Subjects. Subjects were (a) 20 teacher trainees in special education who were completing their final practicum, and (b) 20 special educators (cooperating teachers), each of whom had a trainee in the classroom. Of these cooperating teachers, 12 were in resource programs, 6 were in self-contained public school classrooms, and 2 were in private school settings. The highest educational degree earned was a bachelor's degree for 35% of the cooperating teachers, one master's degree for 55% of the teachers, two master's degrees for 5%, and a specialist for 5%. These teachers had taught special education for an average 7.33 years (SD = 4.17) and were properly certified by the state of Massachusetts. All trainees and cooperating teachers were female.

Procedure. Each trainee was placed in a 231 hour practicum with a cooperating teacher. Approximately 160 hours into this practicum, the cooperating teacher and one of two observers, who had been trained in the study procedures, watched the trainee conduct a lesson with a pupil who was enrolled in the cooperating teacher's program.

Prior to this observation, the trainee provided the observer and the cooperating teacher with a lesson plan, and a behavioral objective that set a criterion of performance in terms of percentage correct

(see Observation Report Form, Part A, in Appendix). During the lesson, the observer recorded the child's actual performance on the behavioral objective (percentage correct) and described the methods employed by the trainee to assess the child's performance on the behavioral objective (see Supervisor Observation Form in Appendix). Following the lesson, the trainee and the cooperating teacher independently (a) rated the success of the lesson, (b) provided a rationale for that rating, (c) indicated whether the student had mastered the behavioral objective, and (d) if the child had not mastered the objective, estimated the actual level of performance (percentage correct) on the objective (see Observation Report Form, Part B, in Appendix). This procedure was repeated for each teacher trainee and cooperating teacher.

Inter-rater agreement for the observers' measurements of children's actual performance on behavioral objectives was assessed across 5 of the 20 observations. Reliability coefficients (proportion of agreement) ranged from .89 to 1.00, with an average coefficient of .94.

Data analysis. The accuracy of the trainees' and cooperating teachers' estimates of child performance on the behavioral objective were compared using *t* tests. Accuracy was defined as the absolute value of the difference between the actual observed percentage and the estimated percentage (see Observation Report Form, Part B). Low scores indicated greater accuracy than high scores. Teachers were awarded a score of 0 when they correctly determined that an objective had been mastered. A correlated *t* test was conducted to determine

whether the inaccuracy of teachers' estimates was dependent on the level of teacher experience (trainee vs. cooperating teacher). Chi square analyses also were run to determine whether teacher accuracy (high vs. low) was related either to the behavioral objective actually being met or to the teachers' judgments that the objective had been met. Additionally, criteria used to determine the success of lessons and the trainees' measurement procedures were summarized.

Results

Survey

Question 1 on the survey asked how frequently teachers determine whether students' IEP objectives have been achieved. Four teachers (2.7%) responded annually, 14 (9.5%) weekly, 15 (10.2%) at periodic review, 97 (65.9%) quarterly, 6 (4.1%) semi-annually, and 11 (7.5%) responded in other ways, including 5 (3.4%) daily, 3 (2.0%) monthly, and 3 (2.0%) no response.

The second question required respondents to check all of the procedures they use to determine whether students have met IEP objectives, and then to circle the one procedure they rely on the most heavily to determine whether IEP objectives have been mastered. Informal observation was marked by 96 of the respondents (65.3%), 29 (19.7%) indicated criterion-referenced instruments; 9 (6.1%) marked norm-referenced standardized tests; and 13 (8.8%) wrote teacher tests or teacher-made assignments. Of the 96 respondents who reported that they primarily employ informal observation, 30 indicated that they rely completely on informal observation for determining whether IEP objectives have been met.

The survey's third question asked teachers how certain they are, in general, about the student's level of performance at the end of an academic lesson. Fifty-nine (40.1%) checked very sure, 79 (53.7%) marked sure, 4 (2.7%) indicated somewhat unsure, and 2 (1.4%) checked not sure (three teachers did not respond to this question).

Question 4 asked how, in the majority of cases, teachers determine a student's level of performance on the material covered in a lesson. Approximately 80% of the respondents checked "observing informally during a lesson," 5.4% stated that they administered a test, and 15.0% indicated that they employed a teacher-made exercise.

When responses of the 20 cooperating teachers who participated in the observation phase of this study were analyzed separately, 15% indicated that they assess mastery of IEP objectives at periodic review, 70% quarterly, 5% daily, and 10% semi-annually. With respect to question 2, 65% reported that they rely predominantly on informal observation, 10% on criterion-referenced measurement, 10% on norm-referenced standardized tests, and 15% on teacher-created exercises. For material covered in daily lessons, 45% were very sure of the accuracy with which they assess students' level of performance; 55% were sure. To assess level of performance on material covered in daily lessons, 85% of the cooperating teachers reported that they rely on informal observation, 5% indicated tests, and 10% marked that they employ their own exercises.

Observation

Measurement procedures employed. Of the 20 trainees, 3 measured children's performance on the lesson objectives with written products,

either a worksheet or a more formal test. Sixteen trainees used games or flashcards to measure the students' performance, but none of these trainees recorded pupils' correct and incorrect responses. One trainee did not attempt to measure in any fashion the child's performance on the behavioral objective. (The observer independently tested the child following that lesson to determine actual level of performance.)

Accuracy of estimates of students' performance. A t test revealed that the trainees' estimates of student performance and students' actual performance on behavioral objectives was significantly different from zero, t (19) = 5.17, $p < .001$ (mean = 15.45%). Cooperating teachers' estimates also were significnatly different from zero, t (19) = 4.61, $p < .001$ (mean = 15.65%). Thus, both trainees and cooperating teachers were inaccurate in their estimates of the children's performance. A correlated t test conducted on the difference between the trainees' and cooperating teachers' estimates indicated that there was no relation between teaching experience and degree of accuracy in estimating levels of performance.

Both trainees and cooperating teachers more frequently judged that objectives had been met rather than failed (see Table 1). However, a chi square analysis revealed no relation between teachers' accuracy (high $< |10|$; low $> |10|$) and their tendency to judge whether objectives had been met.

Insert Table 1 about here

Nevertheless, there was a relation between trainees' and teachers' accuracy and children's actual mastery and non-mastery of objectives, $\chi^2(1) = 5.03$, $p < .025$ for trainees, and $\chi^2(1) = 5.28$, $p < .025$ for teachers. When pupils achieved the instructional objectives, trainees' and cooperating teachers' judgments always were accurate; when objectives were not met, evaluations tended to be inaccurate (see Table 2).

Insert Table 2 about here

Judgments of success. Trainees and cooperating teachers judged lessons as either very successful or successful. Among the trainees, four rated their lessons as very successful and 16 as successful. Eight of the cooperating teachers judged the lessons as very successful and 12 as successful. Teaching experience was not significantly related to the teachers' judgments of the lessons' success.

Seven of the trainees were very sure about their judgments of success, 12 were sure, and one was somewhat unsure. Of the cooperating teachers, 13 were very sure of their judgments, and seven were sure. The teachers' experience was related to the certainty with which they rated the success of lessons, $\chi^2(1) = 5.14$, $p < .025$.

Trainees most frequently cited some aspect of the child's

performance as evidence supporting their judgments of lessons' success. Lesson completion, rapport with or control of the child, and the child's enjoyment of the lesson also were mentioned as reasons to explain ratings of the lessons' success. In contrast, the cooperating teachers most frequently referred to some aspect of the instructional content of the lesson to explain their ratings of success. Cooperating teachers also named flexibility, organization, and the child's performance.

Discussion

The purposes of the study were to determine what procedures special education teachers employ in their assessment of student performance on goals and objectives, and to investigate the adequacy of those procedures. A total of 147 special education teachers responded to a survey designed to gather information on procedures employed by special educators to assess performance on IEP and daily objectives.

Findings indicate that most special education teachers (65.9%) evaluate progress on IEP objectives approximately four times yearly, and that a majority (65.3%) rely on informal observations compiled over each quarter to formulate their decisions concerning whether IEP objectives have been met.

Similarly, for assessing a student's level of performance on material covered in daily lessons, teachers reported overwhelmingly that they employ informal observation (80.0%) and indicated they are quite confident about the accuracy of assessments formulated on informal observations.

The survey data were corroborated by observational data. Observations of practicing teachers, who were implementing lessons for which they had written behavioral objectives, indicated that 17 of 20 (85.0%) actually relied on informal observation to assess the students' level of performance. Ninety-five percent of the observed practicing teachers and 100% of their cooperating teachers were very sure of the accuracy of their judgments of the lessons' success. Thus, it appears that special education teachers tend to employ informal observation to formulate their decisions about students' performance on objectives and do so with confidence about the accuracy of those assessments.

However, additional data suggest that the confidence teachers place in the accuracy of their informal observations may not be well founded. Among 20 practicing teachers and 20 cooperating teachers, who were representative of the survey sample in terms of experience, training, and special program type, the accuracy of assessments of children's performance on objectives was highly inaccurate. Although teachers recognized when objectives actually had been achieved, they failed to judge accurately when objectives were not met. For children who actually had failed objectives, practicing and cooperating teachers frequently indicated that objectives had been met. When they correctly recognized that the objectives had not been achieved, the practicing and cooperating teachers were highly inaccurate in their estimates of the students' actual level of performance. In spite of this inaccuracy, trainees and cooperating teachers said that they were very sure or sure of their assessments. Additionally, teaching

experience affected neither the accuracy nor the confidence of these assessments.

It appears, then, that special educators' reliance on and confidence in informal observation as an assessment tool is unjustified. The purpose of writing instructional objectives in IEP and daily lessons is twofold: to help teachers structure a child's education and to assist educators in evaluating whether the student has changed in the intended ways (Bloom, Hastings, & Madaus, 1971). Criterion-referenced assessment is the process of evaluating whether those objectives have been met. To the extent to which the study sample is representative, this investigation indicates that special education teachers perform criterion-referenced assessments; that is, they formulate decisions concerning whether objectives have been achieved. However, the study also demonstrates that teachers typically do not use systematic procedures to measure children's behavior. Rather, special education teachers tend to rely on informal observation, a practice that often leads to erroneous judgments of levels of academic performance and inaccurate conclusions about whether objectives have been met.

These findings suggest that special education teachers should reevaluate the role of informal observation in their assessment of students' performance on objectives. More systematic measurement procedures would: (a) produce data characterized by greater objectivity and accuracy; (b) lead more often to correct decisions about students' realization of objectives; (c) lead ultimately to better instructional decisions and student achievement (Mirkin, Deno,

Tindal, & Kuehnle, 1980); and (d) address more adequately the IEP component of PL 94-142 (Deno & Mirkin, 1977).

References

Bloom, B. S., Hastings, J. T., & Madaus, G. F. Handbook on formative and summative evaluation of student learning. New York: McGraw-Hill, 1971.

Deno, S. L., & Mirkin, P. K. Data-based program modification: A manual. Reston, Virg.: Council for Exceptional Children, 1977.

Mirkin, P. K., Deno, S. L., Tindal, G., & Kuehnle, K. Formative evaluation: Continued development of data utilization systems (Research Report No. 23). Minneapolis: University of Minnesota, Institute for Research on Learning Disabilities, 1980.

Footnote

Douglas Fuchs also is associated with the Institute for Research on Learning Disabilities as a Post Doctoral Associate.

Table 1

Practicing and Cooperating Teachers with High or Low Accuracy Scores Judging that Objectives Were Met or Failed

	Practicing Teachers		Cooperating Teachers	
	Judged Objective Met	Judged Objective Failed	Judged Objective Met	Judged Objective Failed
High Accuracy ($X \leq \lvert 10 \rvert$)	6[a](0[b], 0[c])	1(1.00, 0)	6(1.63, 3.55)	0
Low Accuracy ($X > \lvert 10 \rvert$)	10(25.00, 9.36)	3(19.33, 3.06)	9(28.63, 12.73)	4(17.75, 8.58)

[a]Number of teachers.

[b]Mean accuracy score in terms of percentage.

[c]Standard deviation of accuracy scores.

Table 2

Practicing and Cooperating Teachers with High or Low Accuracy Scores When Children Actually Met or Failed Objectives

	Practicing Teachers		Cooperating Teachers	
	Child Actually Met Objective	Child Actually Failed Objective	Child Actually Met Objective	Child Actually Failed Objective
High Accuracy ($X \leq \|10\|$)	6[a](0[b], 0[c])	1(1.00, 0)	6(0, 0)	2(6.50, 4.95)
Low Accuracy ($X > \|10\|$)	0	13(14.00, 8.71)	0	12(13.00, 12.34)

[a]Number of teachers.

[b]Mean accuracy score in terms of percentage.

[c]Standard deviation of accuracy scores.

APPENDIX

SURVEY FORM

1. How frequently do you determine whether students' IEP objectives have been achieved?

_____Annually _____At periodic review _____Quarterly
_____Weekly _____Other_____
(specify)

2. First, check (✓) the procedures(s) you use to determine whether your students have met IEP objectives. Second, circle the one procedure you rely on the most to determine whether IEP objectives have been met.

_____Norm-referenced standardized tests
_____Criterion-referenced tests
_____Informal observations
_____Other_____
(specify)

3. (a) Generally speaking, at the end of an academic lesson, how sure are you about the student's level of performance on material in that lesson?

_____ _____ _____ _____
Very Sure Sure Somewhat Unsure Not Sure

(b) In the majority of cases, how do you determine the student's level of performance on the material in the lesson?

_____observing informally during a lesson
_____administering a test
_____other_____
(specify)

4. Please provide the following information.

Sex: _____M _____F Years teaching special education_____

Program type (i.e., LD resource program, MR self-contained, etc.)
_____
_____

Degree(s) and Certification(s) Earned _____

THANK YOU!

OBSERVATION REPORT FORM (PART A)

Student Teacher's Name: _____

Pupil's Name: _____

Date: _____

Observation Number: _____

Behavioral Objective: _____

_____

_____

Please attach your lesson plan.

SUPERVISOR OBSERVATION FORM

Child performance level on the behavioral objective:

Describe briefly how the practicing teacher assessed the child's performance level on the objective.

OBSERVATION REPORT FORM (PART B)

Rate the success of the lesson:

_____	_____	_____	_____
Very Successful	Successful	Somewhat Unsuccessful	Not Successful

How sure are you?

_____	_____	_____	_____
Very Sure	Sure	Somewhat Unsure	Not Sure

Briefly explain why you selected the above category of success.

Did the child master the behavioral objective?

_____Yes _____No

If "no," estimate the percentage correct at which the child did perform.

_____

PUBLICATIONS

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Requests should be directed to: Editor, IRLD, 350 Elliott Hall; 75 East River Road, University of Minnesota, Minneapolis, MN 55455.

Ysseldyke, J. E. Assessing the learning disabled youngster: The state of the art (Research Report No. 1). November, 1977.

Ysseldyke, J. E., & Regan, R. R. Nondiscriminatory assessment and decision making (Monograph No. 7). February, 1979.

Foster, G., Algozzine, B., & Ysseldyke, J. Susceptibility to stereotypic bias (Research Report No. 3). March, 1979.

Algozzine, B. An analysis of the disturbingness and acceptability of behaviors as a function of diagnostic label (Research Report No. 4). March, 1979.

Algozzine, B., & McGraw, K. Diagnostic testing in mathematics: An extension of the PIAT? (Research Report No. 5). March, 1979.

Deno, S. L. A direct observation approach to measuring classroom behavior: Procedures and application (Research Report No. 6). April, 1979.

Ysseldyke, J. E., & Mirkin, P. K. Proceedings of the Minnesota round-table conference on assessment of learning disabled children (Monograph No. 8). April, 1979.

Somwaru, J. P. A new approach to the assessment of learning disabilities (Monograph No. 9). April, 1979.

Algozzine, B., Forgnone, C., Mercer, C. D., & Trifiletti, J. J. Toward defining discrepancies for specific learning disabilities: An analysis and alternatives (Research Report No. 7). June, 1979.

Algozzine, B. The disturbing child: A validation report (Research Report No. 8). June, 1979.

Note: Monographs No. 1 - 6 and Research Report No. 2 are not available for distribution. These documents were part of the Institute's 1979-1980 continuation proposal, and/or are out of print.

Ysseldyke, J. E., Algozzine, B., Regan, R., & Potter, M. Technical adequacy of tests used by professionals in simulated decision making (Research Report No. 9). July, 1979.

Jenkins, J. R., Deno, S. L., & Mirkin, P. K. Measuring pupil progress toward the least restrictive environment (Monograph No. 10). August, 1979.

Mirkin, P. K., & Deno, S. L. Formative evaluation in the classroom: An approach to improving instruction (Research Report No. 10). August, 1979.

Thurlow, M. L., & Ysseldyke, J. E. Current assessment and decision-making practices in model programs for the learning disabled (Research Report No. 11). August, 1979.

Deno, S. L., Chiang, B., Tindal, G., & Blackburn, M. Experimental analysis of program components: An approach to research in CSDC's (Research Report No. 12). August, 1979.

Ysseldyke, J. E., Algozzine, B., Shinn, M., & McGue, M. Similarities and differences between underachievers and students labeled learning disabled: Identical twins with different mothers (Research Report No. 13). September, 1979.

Ysseldyke, J., & Algozzine, R. Perspectives on assessment of learning disabled students (Monograph No. 11). October, 1979.

Poland, S. F., Ysseldyke, J. E., Thurlow, M. L., & Mirkin, P. K. Current assessment and decision-making practices in school settings as reported by directors of special education (Research Report No. 14). November, 1979.

McGue, M., Shinn, M., & Ysseldyke, J. Validity of the Woodcock-Johnson psycho-educational battery with learning disabled students (Research Report No. 15). November, 1979.

Deno, S., Mirkin, P., & Shinn, M. Behavioral perspectives on the assessment of learning disabled children (Monograph No. 12). November, 1979.

Sutherland, J. H., Algozzine, B., Ysseldyke, J. E., & Young, S. What can I say after I say LD? (Research Report No. 16). December, 1979.

Deno, S. L., & Mirkin, P. K. Data-based IEP development: An approach to substantive compliance (Monograph No. 13). December, 1979.

Ysseldyke, J., Algozzine, B., Regan, R., & McGue, M. The influence of test scores and naturally-occurring pupil characteristics on psycho-educational decision making with children (Research Report No. 17). December, 1979.

Algozzine, B., & Ysseldyke, J. E. Decision makers' prediction of students' academic difficulties as a function of referral information (Research Report No. 18). December, 1979.

Ysseldyke, J. E., & Algozzine, B. Diagnostic classification decisions as a function of referral information (Research Report No. 19). January, 1980.

Deno, S. L., Mirkin, P. K., Chiang, B., & Lowry, L. Relationships among simple measures of reading and performance on standardized achievement tests (Research Report No. 20). January, 1980.

Deno, S. L., Mirkin, P. K., Lowry, L., & Kuehnle, K. Relationships among simple measures of spelling and performance on standardized achievement tests (Research Report No. 21). January, 1980.

Deno, S. L., Mirkin, P. K., & Marston, D. Relationships among simple measures of written expression and performance on standardized achievement tests (Research Report No. 22). January, 1980.

Mirkin, P. K., Deno, S. L., Tindal, G., & Kuehnle, K. Formative evaluation: Continued development of data utilization systems (Research Report No. 23). January, 1980.

Deno, S. L., Mirkin, P. K., Robinson, S., & Evans, P. Relationships among classroom observations of social adjustment and sociometric rating scales (Research Report No. 24). January, 1980.

Thurlow, M. L., & Ysseldyke, J. E. Factors influential on the psychoeducational decisions reached by teams of educators (Research Report No. 25). February, 1980.

Ysseldyke, J. E., & Algozzine, B. Diagnostic decision making in individuals susceptible to biasing information presented in the referral case folder (Research Report No. 26). March, 1980.

Thurlow, M. L., & Greener, J. W. Preliminary evidence on information considered useful in instructional planning (Research Report No. 27). March, 1980.

Ysseldyke, J. E., Regan, R. R., & Schwartz, S. Z. The use of technically adequate tests in psychoeducational decision making (Research Report No. 28). April, 1980.

Richey, L., Potter, M., & Ysseldyke, J. Teachers' expectations for the siblings of learning disabled and non-learning disabled students: A pilot study (Research Report No. 29). May, 1980.

Thurlow, M. L., & Ysseldyke, J. E. Instructional planning: Information collected by school psychologists vs. information considered useful by teachers (Research Report No. 30). June, 1980.

Algozzine, B., Webber, J., Campbell, M., Moore, S., & Gilliam, J. Classroom decision making as a function of diagnostic labels and perceived competence (Research Report No. 31). June, 1980.

Ysseldyke, J. E., Algozzine, B., Regan, R. R., Potter, M., Richey, L., & Thurlow, M. L. Psychoeducational assessment and decision making: A computer-simulated investigation (Research Report No. 32). July, 1980.

Ysseldyke, J. E., Algozzine, B., Regan, R. R., Potter, M., & Richey, L. Psychoeducational assessment and decision making: Individual case studies (Research Report No. 33). July, 1980.

Ysseldyke, J. E., Algozzine, B., Regan, R., Potter, M., & Richey, L. Technical supplement for computer-simulated investigations of the psychoeducational assessment and decision-making process (Research Report No. 34). July, 1980.

Algozzine, B., Stevens, L., Costello, C., Beattie, J., & Schmid, R. Classroom perspectives of LD and other special education teachers (Research Report No. 35). July, 1980.

Algozzine, B., Siders, J., Siders, J., & Beattie, J. Using assessment information to plan reading instructional programs: Error analysis and word attack skills (Monograph No. 14). July, 1980.

Ysseldyke, J., Shinn, M., & Epps, S. A comparison of the WISC-R and the Woodcock-Johnson Tests of Cognitive Ability (Research Report No. 36). July, 1980.

Algozzine, B., & Ysseldyke, J. E. An analysis of difference score reliabilities on three measures with a sample of low achieving youngsters (Research Report No. 37). August, 1980.

Shinn, M., Algozzine, B., Marston, D., & Ysseldyke, J. A theoretical analysis of the performance of learning disabled students on the Woodcock-Johnson Psycho-Educational Battery (Research Report No. 38). August, 1980.

Richey, L. S., Ysseldyke, J., Potter, M., Regan, R. R., & Greener, J. Teachers' attitudes and expectations for siblings of learning disabled children (Research Report No. 39). August, 1980.

Ysseldyke, J. E., Algozzine, B., & Thurlow, M. L. (Eds.). A naturalistic investigation of special education team meetings (Research Report No. 40). August, 1980.

Meyers, B., Meyers, J., & Deno, S. Formative evaluation and teacher decision making: A follow-up investigation (Research Report No. 41). September, 1980.

Fuchs, D., Garwick, D. R., Featherstone, N., & Fuchs, L. S. On the determinants and prediction of handicapped children's differential test performance with familiar and unfamiliar examiners (Research Report No. 42). September, 1980.

Algozzine, B., & Stoller, L. Effects of labels and competence on teachers' attributions for a student (Research Report No. 43). September, 1980.

Ysseldyke, J. E., & Thurlow, M. L. (Eds.). The special education assessment and decision-making process: Seven case studies (Research Report No. 44). September, 1980.

Ysseldyke, J. E., Algozzine, B., Potter, M., & Regan, R. A descriptive study of students enrolled in a program for the severely learning disabled (Research Report No. 45). September, 1980.

Marston, D. Analysis of subtest scatter on the tests of cognitive ability from the Woodcock-Johnson Psycho-Educational Battery (Research Report No. 46). October, 1980.

Algozzine, B., Ysseldyke, J. E., & Shinn, M. Identifying children with learning disabilities: When is a discrepancy severe? (Research Report No. 47). November, 1980.

Fuchs, L., Tindal, J., & Deno, S. Effects of varying item domain and sample duration on technical characteristics of daily measures in reading (Research Report No. 48). January, 1981.

Marston, D., Lowry, L., Deno, S., & Mirkin, P. An analysis of learning trends in simple measures of reading, spelling, and written expression: A longitudinal study (Research Report No. 49). January, 1981.

Marston, D., & Deno, S. The reliability of simple, direct measures of written expression (Research Report No. 50). January, 1981.

Epps, S., McGue, M., & Ysseldyke, J. E. Inter-judge agreement in classifying students as learning disabled (Research Report No. 51). February, 1981.

Epps, S., Ysseldyke, J. E., & McGue, M. Differentiating LD and non-LD students: "I know one when I see one" (Research Report No. 52). March, 1981.

Evans, P. R., & Peham, M. A. S. Testing and measurement in occupational therapy. A review of current practice with special emphasis on the Southern California Sensory Integration Tests (Monograph No. 15). April, 1981.

Fuchs, L., Wesson, C., Tindal, G., & Mirkin, P. Teacher efficiency in continuous evaluation of IEP goals (Research Report No. 53). June, 1981.

Fuchs, D., Featherstone, N., Garwick, D. R., & Fuchs, L. S. The importance of situational factors and task demands to handicapped children's test performance (Research Report No. 54). June, 1981.

Tindal, G., & Deno, S. L. Daily measurement of reading: Effects of varying the size of the item pool (Research Report No. 55). July, 1981.

Fuchs, L. S., & Deno, S. L. A comparison of teacher judgment, standardized tests, and curriculum-based approaches to reading placement (Research Report No. 56). August, 1981.

Fuchs, L., & Deno, S. The relationship between curriculum-based mastery measures and standardized achievement tests in reading (Research Report No. 57). August, 1981.

Christenson, S., Graden, J., Potter, M., & Ysseldyke, J. Current research on psychoeducational assessment and decision making: Implications for training and practice (Monograph No. 16). September, 1981.

Christenson, S., Ysseldyke, J., & Algozzine, B. Institutional constraints and external pressures influencing referral decisions (Research Report No. 58). October, 1981.

Fuchs, L., Fuchs, D., & Deno, S. Reliability and validity of curriculum-based informal reading inventories (Research Report No. 59). October, 1981.

Algozzine, B., Christenson, S., & Ysseldyke, J. Probabilities associated with the referral-to-placement process (Research Report No. 60). November, 1981.

Tindal, G., Fuchs, L. Christenson, S., Mirkin, P., & Deno, S. The relationship between student achievement and teacher assessment of short- or long-term goals (Research Report No. 61). November, 1981.

Mirkin, P., Fuchs, L., Tindal, G., Christenson, S., & Deno, S. The effect of IEP monitoring strategies on teacher behavior (Research Report No. 62). December, 1981.

Wesson, C., Mirkin, P., & Deno, S. Teachers' use of self instructional materials for learning procedures for developing and monitoring progress on IEP goals (Research Report No. 63). January, 1982.

Fuchs, L., Wesson, C., Tindal, G., Mirkin, P., & Deno, S. Instructional changes, student performance, and teacher preferences: The effects of specific measurement and evaluation procedures (Research Report No. 64). January, 1982.

Potter, M., & Mirkin, P. Instructional planning and implementation practices of elementary and secondary resource room teachers: Is there a difference? (Research Report No. 65). January, 1982.

Thurlow, M. L., & Ysseldyke, J. E. Teachers' beliefs about LD students (Research Report No. 66). January, 1982.

Graden, J., Thurlow, M. L., & Ysseldyke, J. E. Academic engaged time and its relationship to learning: A review of the literature (Monograph No. 17). January, 1982.

King, R., Wesson, C., & Deno, S. Direct and frequent measurement of student performance: Does it take too much time? (Research Report No. 67). February, 1982.

Greener, J. W., & Thurlow, M. L. Teacher opinions about professional education training programs (Research Report No. 68). March, 1982.

Algozzine, B., & Ysseldyke, J. Learning disabilities as a subset of school failure: The oversophistication of a concept (Research Report No. 69). March, 1982.

Fuchs, D., Zern, D. S., & Fuchs, L. S. A microanalysis of participant behavior in familiar and unfamiliar test conditions (Research Report No. 70). March, 1982.

Shinn, M. R., Ysseldyke, J., Deno, S., & Tindal, G. A comparison of psychometric and functional differences between students labeled learning disabled and low achieving (Research Report No. 71). March, 1982.

Thurlow, M. L. Graden, J., Greener, J. W., & Ysseldyke, J. E. Academic responding time for LD and non-LD students (Research Report No. 72). April, 1982.

Graden, J., Thurlow, M., & Ysseldyke, J. Instructional ecology and academic responding time for students at three levels of teacher-perceived behavioral competence (Research Report No. 73). April, 1982.

Algozzine, B., Ysseldyke, J., & Christenson, S. The influence of teachers' tolerances for specific kinds of behaviors on their ratings of a third grade student (Research Report No. 74). April, 1982.

Wesson, C., Deno, S., & Mirkin, P. Research on developing and monitoring progress on IEP goals: Current findings and implications for practice (Monograph No. 18). April, 1982.

Mirkin, P., Marston, D., & Deno, S. L. Direct and repeated measurement of academic skills: An alternative to traditional screening, referral, and identification of learning disabled students (Research Report No. 75). May, 1982.

Tucker, J., Stevens, L. J., & Ysseldyke, J. E. Learning disabilities: The experts speak out (Research Report No. 77). June, 1982.

Thurlow, M. L., Ysseldyke, J. E., Graden, J., Greener, J. W., & Mecklenberg, C. Academic responding time for LD students receiving different levels of special education services (Research Report No. 78). June, 1982.

Graden, J. L., Thurlow, M. L., Ysseldyke, J. E., & Algozzine, B. Instructional ecology and academic responding time for students in different reading groups (Research Report No. 79). July, 1982.

Mirkin, P. K., & Potter, M. L. A survey of program planning and implementation practices of LD teachers (Research Report No. 80). July, 1980.

Fuchs, L. S., Fuchs, D., & Warren, L. M. Special education practice in evaluating student progress toward goals (Research Report No. 81). July, 1982.